

National Wildlife Health Center Wildlife Health Bulletin 2016-01

Large-scale Mortality of Common Murres in Alaska

To: Natural Resource/Conservation ManagersFrom: Julie Lenoch, Deputy Center Director, USGS National Wildlife Health CenterDate: January 22, 2016

Since March 2015, a seabird mortality event has been on-going throughout the northern Gulf of Alaska, including beaches on the Alaska Peninsula, Aleutians East, Kodiak, Homer, Kenai Fjords, Seward, Prince William Sound (PWS), Kayak and Wingham islands (southeast of PWS) and most recently in southeast Alaska near Juneau and Sitka. Common murres (*Uria aalge*) are the primary avian species known to be affected. Reports of carcasses on beaches have ranged from a dozen to several thousand observed at a time. On December 31, 2015, thousands of dead and moribund seabirds were reported in PWS; the majority of which were common murres. Large floating aggregations (rafts) of murres are also being reported in PWS and are apparently lethargic and exhibiting minimal avoidance behavior. During May to September 2015, mortality events in Alaska also involved thick-billed murres (*U. lomvia*), black-legged kittiwakes (*Rissa tridactyla*), horned and tufted puffins (*Fratercula corniculata* and *F. cirrhata*), murrelets (*Brachyramphus* sp.), glaucous-winged gulls (*Larus glaucescens*), and sooty and short-tailed shearwaters (*Puffinus griseus* and *P. tenuirostris*). Some of these mortalities were identified concurrent with whale, pinniped, sea otter (*Enhydra lutris*), and fish mortalities.

As of January 20, 2016, the USGS National Wildlife Health Center (NWHC) has examined 106 bird carcasses (81 of which were common murres) linked to this event. The most common finding for both juvenile and adult specimens has been emaciation. Further research is needed to determine if potential impacts of recent unprecedented warm ocean temperatures may be affecting seabird prey distribution or abundance. Diagnostic laboratory and histopathology examinations completed at NWHC have not revealed evidence of infectious disease. Results from testing for algal toxins (i.e., saxitoxin and domoic acid) are pending and are being performed in partnership with the National Oceanic and Atmospheric Administration's (NOAA) Northwest Fisheries Science Center, University of California at Santa Cruz, and Greenwater Laboratories. The NWHC continues to receive specimens from new locations and is collaborating with partners to determine long-term monitoring and response needs.

Multiple agencies have been collaborating to investigate this event. In addition to the NWHC, other partners include the U.S. Fish and Wildlife Service, Alaska Department of Fish and Game, USGS Alaska Science Center, National Park Service, Alaska SeaLife Center, University of Washington-Coastal Observation and Seabird Survey Team (COASST), USDA/APHIS/Wildlife Services, NOAA's Marine Mammal Stranding Network, Alaska Native Tribal Health Consortium, and the general public. Efforts to further investigate the cause of this event will continue to benefit from multidisciplinary collaborations.

Wildlife managers should remain vigilant for wild bird morbidity and mortality events and contact the NWHC to discuss submission and testing of carcasses from these events (see contact information below). Wildlife rehabilitators are encouraged to contact their local wildlife management agency for guidance if they receive debilitated birds. A USFWS factsheet titled "<u>Alaska Seabird Die-off</u>" provides current information and includes contact information for public reporting of dead seabirds.

Information about this event and other ongoing wildlife mortality events can be accessed online through the <u>Wildlife</u> <u>Health Information Sharing Partnership – event reporting system (WHISPers)</u>.

NWHC Disease Investigation Services

To request diagnostic services or report wildlife mortality, please contact the NWHC at **608-270-2480** or by email at <u>NWHC-epi@usgs.gov</u>, and a field epidemiologist will be available to discuss the case. To report wildlife mortality events in Hawaii or Pacific Island territories, please contact the Honolulu Field Station at 808-792-9520 or email Thierry Work at <u>thierry_work@usgs.gov</u>. Further information can be found at <u>http://www.nwhc.usgs.gov/services/</u>.

Wildlife Mortality Reporting and Diagnostic Submission Request Worksheet

If you have any questions or concerns regarding the scientific and technical services we provide, please do not hesitate to contact NWHC Deputy Director Julie Lenoch at 608-270-2407, <u>jlenoch@usgs.gov</u>.

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